

Amendments to the Specification:

Please replace the three consecutive paragraphs beginning, respectively, on page 6, line 3; page 6, line 16; and page 6, line 22 with the following four paragraphs. Each of the four new paragraphs is preceded by a subtitle in bolded capitol letters.

--RELATIVE DISTANCES OF A AND B FROM END EDGE OF SUBSTRATE

As seen in Figure 6, the peripheral portion of photoresist layer 40 is terminated photolithographically to form an end edge 46 closer to end edge 6 of substrate 2 than end 36 of chemically terminated ARC layer 30 so that the rough edge surface of end edge 36 of chemically terminated ARC layer 30 is completely covered by photoresist layer 40. Figure 6 shows that the distance A from end edge point 4 on substrate 2 to the chemically formed end 36 of ARC layer 30 exceeds distance B from end edge 4 of substrate 2 to photolithographically formed edge 46 of photoresist layer 40 by an amount A minus B A-B--

--MAXIMUM DISTANCE OF A

Since stepper apparatus used to subsequently process photoresist layer 40 photolithographically does so to within 3 millimeters (mm) of end edge 4 of substrate 2, it is important that the maximum value of A be less than 3 mm (to ensure that there is an antireflective surface beneath any portions of photoresist layer 40 exposed to radiation from the stepper apparatus). Thus, for example, when substrate 2 is a 200 mm diameter semiconductor wafer, the minimum diameter of ARC layer 30 thereon (after chemical formation of edge 36) should be greater than 194 mm, i.e., a minimum radius of ARC layer of greater than 97 mm--

--MAXIMUM DISTANCE OF B

Furthermore, to ensure that there is sufficient distance between edge 46 of photoresist layer 40 and edge 36 of ARC layer 30 to permit formation of the desired accurate photolithographically-formed edge 46 on photoresist layer 40, the maximum value of B should be at least about 0.5 mm less than A. That is, A minus B ~~A-B~~ should equal at least 0.5 mm. Therefore, for the above 200 mm semiconductor wafer, the diameter of photoresist layer 40 thereon (after photolithographical formation of edge 46) should be greater than 195 mm, i.e., a radius of greater than 97.5 mm--.

--MINIMUM DISTANCES OF A AND B

However, to permit adequate area for peripheral grasping of substrate 2 without risking flaking of photoresist material, the minimum value of B should be at least 1 mm. For the above example of a 200 mm semiconductor wafer, the diameter of photoresist layer 40 on the wafer (after photolithographical formation of edge 46) should not exceed 198 mm. The minimum value of A then should be at least 1 mm + at least 0.5 mm for a total of at least 1.5 mm, The maximum diameter of the ARC layer, in the above example, would then be 197 mm.--